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# China Report

AGRICULTURE

No. 93



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30 July 1980

## CHINA REPORT

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## I. GENERAL INFORMATION

## NORTHEAST CHINA AS MARKETABLE GRAIN BASE SUGGESTED

OW160628 Beijing XINHUA Domestic Service in Chinese 1413 GMT 15 Jul 80

["Text" of RENMIN RIBAO 15 July editorial: "A Measure of Strategic Importance for All of Agriculture"]

[Text] Beijing, 15 Jul--The State Council recently decided to step up efforts to build northeast China into a marketable grain base by vigorously developing agricultural mechanization there. It has also listed this task as a key item in the state plan. This is a strategic measure that bears on all of China's agriculture, a measure of very high significance.

As we pursue the four modernizations, our need for marketable grain will grow increasingly greater. Our nonagricultural population will continue to grow along with the development of various economic, cultural and social service undertakings. To increase the supply of such nonstaple foods as meat, eggs and milk to improve the livelihood of the people in the cities and rural areas, we will have to develop the fodder industry. All this calls for a marketable grain production expansion. At present, all localities in the country are readjusting the proportions of crops they grow by giving scope to what is superior under their local conditions and promoting an all-round development of agriculture, forestry, animal husbandry, sideline and fishery. As a result, grain crop acreage has declined in some areas. This makes it all the more necessary for us to pay attention to the development of marketable grain production. If we neglect this, the gap in the supply of marketable grain will become bigger and bigger, which inevitably will affect the people's livelihood and hinder the development of the four modernizations. What is more, the state will find itself in a more passive position should something happen. Therefore, to strengthen the building of marketable grain bases has become a major question for our country today that calls for an urgent solution.

The average size of our country's existing marketable grain bases covers only an area of several counties or a dozen or so counties. Moreover, most of these bases are situated in high grain-yield areas, such as the

Hangzhou-Jiaxing-Huzhou area and the Taihu area. Since the unit yield of grain in these areas is considerably high already, to further tap these areas' potentials, though still possible, will require a high cost and great effort. It is obvious that it would be far from meeting our needs if we are to rely only on these areas. What we should do is choose areas with the highest superiority in grain output and most promising future for development to build marketable grain bases where productivity and the marketability of grain will be even higher.

Taking the country as a whole, the great Song-Liao plain in northeast China with its vast expanse of fertile land and rich resources is the largest of the three great plains in China. The acreage of cultivated land in this plain accounts for a sixth of the country's total, averaging 24 mu for every farm worker, which is five times the national average. In addition, there are still large tracts of barren land that are reclaimable. Because the plain is large in area and limited in population, it has an extremely great potential for increased agricultural production and is in a superior position to any other area in the country for the development of marketable grain production. Now the state has made the decision to continue to reclaim large areas of land in Heilongjiang Province to vigorously increase its marketable grain output. The per mu grain yield in many places of northeast China is now only over 200 jin. Efforts should be made to continue to raise the level of unit yield there from now on. At the same time, efforts to develop soybean production, which occupies a special position in our country's national economy, should continue. Judging from the entire situation of agriculture and the characteristics of the northeast China area, to build the area into a key base of marketable grain will require limited investments but bring great profits and swift results. It is economically very profitable for the northeast China area, which is suitable for the production of marketable grain and soybeans, to expand grain and soybean production to support other areas which are suited to the production of cotton, sugarcane, oil-bearing crops and other industrial crops to grow more of these industrial crops. This will help all localities in the country give scope to their respective superiorities to the greatest extent possible and will prove to be highly useful to the whole country in regard to making readjustments and achieving a reasonable distribution of agriculture crops.

Conditions in the northeast China area are quite different from those in most areas on this side of Sanhaiguan. In developing agriculture in the northeast China area, the key is to pay attention to farm mechanization. At present, due to limitations in its financial and material resources as well as to other conditions, our country is unable to promote farm mechanization in an all-round way. It is also not practicable to spread out our limited resources evenly across the country, which would be like sprinkling pepper from a pepper shaker, with each area getting only a trickle. What we must and should do is to choose some areas where the superiority of farm mechanization can best be brought into play so as to



concentrate our forces there. The northeast China area is such a key area most suitable for mechanization. The way for the northeast China area to take advantage of its strong points in developing agriculture is to give play to its superiority in its land area by improving large tracts of low-yield farmland and turning more large tracts of barren fields into fertile land and thereby expanding the cultivated area by several million mu. The way for the northeast China area to avoid being hampered by its weak points is to change the present situation of low-level productive forces. In the northeast China countryside, there is a shortage of labor force and a relatively short frost-free period. By relying only on manpower and animal power in farming, spring sowing there takes more than 1 month. This delays crop growth and it is very hard for the crops to grow in time before the onset of early frost when autumn sets in. This often results in reducing grain output by as much as billions of jin. Therefore, for this area to take advantage of its strong points and avoid being hampered by its weak points in developing agriculture, the key lies in mechanization. As mechanization develops, it will be possible for the area to expand its area of cultivated land, increase its unit yield by a large margin and raise the marketability of its agricultural products as well as its productivity. Furthermore, it will be able to use large numbers of its labor force for the development of diversified economy, transform the agricultural structure, promote rural economic prosperity and gradually build a modern and large-scale socialist agriculture.

The state should financially and materially support the northeast China area in speeding up farm mechanization and in building itself into a marketable grain base. All central departments must enthusiastically and vigorously give their support. The three northeast China provinces themselves should carry forward the revolutionary spirit of self-reliance. People's communes should mainly rely on themselves in obtaining funds for farm mechanization. In recent years the northeast China countryside has rehabilitated and developed agriculture at a relatively fast speed. A relatively larger number of prosperous communes and prosperous subordinate units are found there. Peasant income has increased. To help communes and subordinate units there solve the problem of having to make the entire investment for the procurement of farm machines at one time, the state has decided to give effective support by increasing the necessary funds appropriated exclusively for extending long-term, low-interest farm machinery loans. The northeast China area also has a better foundation for agricultural mechanization; mechanization there has reached an advanced stage on a national level. Efforts should be made there to further strengthen leadership and take full advantage of these favorable conditions. The northeast China area should follow the road of Chinese-type agricultural modernization in promoting farm mechanization. It should follow the practice of relying on machines that are made in China. The nearly 2,000 agricultural machinery enterprises now in China have already reached a considerably high level of production and are fully competent to shoulder this task.



Using domestically produced machines will not only save large amounts of foreign exchange and cut down investments, it will also make it more convenient by having to rely only on local conditions such as in getting accessories and obtaining repair for the machines, and will help accumulate experience through practice in building a contingent of technicians for the development of mechanization by ourselves. The agricultural machinery departments should shoulder this glorious task and go all out in reforming their work.

We should conscientiously implement the party's economic policies so as to use the might of these policies to fully arouse the enthusiasm of the northeast China peasant masses for the production of grain and soybeans. The state has now specifically decided that grain purchase targets will be fixed for 5 consecutive years without change, that purchase of grain in excess of target will be made at a higher price, that communes and subordinate units will have the right to dispose of any surplus grain themselves after fulfilling their purchase and above-target purchase tasks. The state has also set forth the relevant price and credit policies which will greatly help in developing marketable grain and soybean production in the northeast China area. These policies must be implemented in full. It is necessary to guarantee that peasants will be able to obtain a reasonable economic income from marketable grain and soybean production so as to insure that they will keep their minds on production and do their share in building the marketable grain base. If these policies are implemented well, if profit is guaranteed for communes and subordinate units when they sell their marketable grain and soybean, if public accumulation increases quickly, it will raise the capability of these communes and subordinate units to expand production and repay state loans. This will speed the turnover of funds available for loans and greatly help accelerate mechanization.

CSO: 4007

'GUANGMING RIBAO' CALLS FOR ELIMINATING 'MODERN SUPERSTITIONS'

OW131529 Beijing XINHUA Domestic Service in Chinese 0741 GMT 13 Jul 80

[Text] Beijing, 13 Jul--Today's RENMIN RIBAO reprinted on its front page a news report "Qiliying in Xinxiang [Henin Province] Reaps Another Good Harvest of Its 'Inspection Field' After Planting Other Crops" published in the 12 July GUANGMING RIBAO and the latter's editor's note to the report.

The GUANGMING RIBAO editor's note says: The report "Qiliying in Xinxiang Reaps Another Good Harvest of Its 'Inspection Field' After Planting Other Crops" cited a vivid example to show the noticeable change from a drop in production before emancipation of the mind to the development of production after emancipation of the mind. We must uphold the party's ideological line and must no longer practice any modern superstitions aimed at confining people's minds and stifling their intelligence.

Modern superstitions run counter to Marxism and science. After the downfall of the "gang of four," the party Central Committee reiterated that memorial halls should not be built for party leaders everywhere, inspection fields should not be designated in memory of them and so on and so forth. But this practice has not yet been completely stopped. One example is that in some localities, houses in which party leaders once stayed have been closed for a long time. This is a reflection of feudal ideology within the party, and its influence is by no means confined to the sealing off and waste of a few houses. The influence of feudal ideology must be eliminated.

The GUANGMING RIBAO report reads in full: After planting wheat and rice, the Qiliying brigade in Xinxiang County, Henan Province, has reaped a good wheat harvest and will soon reap a good rice harvest on its 350 mu of cotton fields once inspected by Comrade Mao Zedong. Per-mu wheat yield was more than 700 jin, and the rice crop is growing well and a good harvest is in sight. This is a great success achieved by the cadres and masses of this brigade by doing away with superstitions, emancipating their minds, seeking truth from facts and acting in the scientific spirit while discussing the criterion of truth.

In 1958 Comrade Mao Zedong inspected the Qiliying brigade's 150 mu of cotton fields, which was later called the "inspection fields." Thus, cotton had been planted on these fields every year until 1978.

In the first 10 years after 1958, the annual per-mu output of ginned cotton exceeded 100 jin as a result of careful field management, and the highest per-mu output in any year reached 160 jin. Since 1968, however, the soil of these fields has changed drastically becoming alkalined and moist thus causing stem blight and cotton wilt. Cotton stalks would not grow and entire fields of sprouts died. The peasants masses put a great deal of work and money in these fields and applied precious insecticide to every cotton sprout at a cost of 0.3 yuan per sprout. They did all this in the hope that the cotton yield would not decrease. Because the law of nature and the law of planting are irresistible, all these efforts ended in failure and the yield of these cotton fields declined year after year. By 1976 the per-mu yield of ginned cotton fell to 90 jin.

Why did the yield decline? It was simply due to a failure to rotate crops on these fields. Rotating crops is a basic knowledge about farming and is understood by the cadres and other members of the Qiliying production brigade. But why didn't they rotate crops on the "inspection fields" that were apparently not suited for cotton? The primary reason was their failure to proceed from reality and their failure to persevere in the ideological line of seeking truth from facts. During those years of "unprecedentedly" carrying out "propaganda vigorously," everyone was afraid of being charged with being disloyal to the leader and thus no one dared to make the decision to plant crops other than cotton on these fields.

With the smashing of the "gang of four," this modern superstitious idea remained. People of the brigade could not do anything but wasted their toil, energy, time and money in planting cotton on these fields as usual.

In 1978 the discussion of the criterion of truth woke up the cadres and other members of the Qiliying production brigade and emancipated their minds. They said that Chairman Mao consistently stood for seeking truth from facts and doing things in a scientific way and that they should have the same approach in farming. "It has been 20 years since Chairman Mao's inspection. The soil of the fields he inspected has changed and stem blight and cotton wilt have occurred. We should proceed from reality and rotate crops on their fields. If Chairman Mao were still here, he would agree with us. We can no longer offer to do such a stupid thing as exerting a great deal of effort and achieve almost nothing."

With this in mind, they changed crops and planted wheat on the "inspection fields." Last year, the per-mu output of wheat harvested from these fields reached more than 700 jin and the brigade reaped a bumper harvest of summer rice with a per-mu yield of over 800 jin. Meanwhile, they planted

cotton on other tracts of land and the per-mu output of ginned cotton harvested was more than 140 jin. Both good harvests of wheat and cotton greatly benefited the collective and the individual commune members. Each year, the brigade can reap an additional quantity of 10,000 jin of ginned cotton and increase grain production by more than 100,000 jin without increasing investment or putting in more days of work on the cropland. They have achieved all this by simply rotating crops on the "inspection fields." What an apparent difference between the two ideological lines and between their results!

CSO: 4007

# DEVELOPMENT OF FODDER INDUSTRY CONTINUES

OW150643 Beijing XINHUA in English 0830 GMT 15 Jul 80

[Text] Beijing, July 15 (XINHUA)--China has built 79 major fodder plants with an annual production capacity of 620,000 tons of mixed or compound livestock feeds.

These figures were reported at a national meeting called by the Ministry of Food, which closed here last week.

The livestock feeds are mainly composed of grain and grain by-products, fish meal, bean cake, cotton seed cake and forage grass. Nutritive supplements such as powdered calcium are also used.

A number of factories have also been built to produce fish meal, bone powder, bacterial protein and nutritive supplements.

Processing of fodder is a new industry in China. Another 74 major fodder plants are under construction and there are plans to build 70 more. When all these are completed, their annual production capacity will be 960,000 tons.

While the big fodder plants are built with investment of the central and provincial governments, medium-sized and small ones, which can be put up and go into production quickly, are built by counties, communes and production brigades.

Beijing now has 29 large and medium-sized fodder plants and more than 60 fodder processing centres in rural communes, all built between 1975 and 1979. They produced 200,000 tons of fodder last year to cater to the needs of the more than 630 mechanized and semi-mechanized pig, chicken and duck farms on the city's outskirts.

CSO: 4020

## CONSERVATION IN LAND USE URGED

Beijing RENMIN RIBAO in Chinese 29 Apr 80 p 5

[Article by Zhang Zhenming (1728 2182 6900): "Shout Loudly For Conservation in the Use of Land"]

[Text] Land is the basic means of production in agriculture and it is also an important means of production for industry. All of the plant buildings, roads, pipelines and warehouses needed by industrial transportation units are inseparable from land. Other sectors of the national economy and every trade and industry in social life are inseparable from land. The development of production for the entire society and improvement in the livelihood of the people, bringing about a balance in the natural ecology and improving the environment are all intimately related to use of land. Therefore, effective care and rational use of a nation's land has become a major issue in modernized construction and scientific management of the national economy in every nation of the world.

One of the noteworthy contradictions that China's modernized construction faces is a large population, scant land, and even less arable land. The total land area of our country is approximately 14.4 billion mu, the third largest in the world. But since the population is so vast, the average land area per person is only 15 mu, or less than one-third the 49.5 which is the average amount per person on the basis of world population figures. The high plateaus, mountainlands, prairies, and deserts of our country are numerous, while arable land occupies a relatively small amount of the total area. About 1.5 billion mu of land is currently under cultivation. This amounts to about 10 percent of the total land area of the country. The land under cultivation averages less than 1.6 mu per person average for the world on the basis of population. The 1.67 billion mu of cultivated land throughout the country existing in 1957 declined in 1977 to 1.49 billion mu. Over a 20 year period, cultivated land was reduced by 500 million mu as a result of its use for capital construction and because of natural disasters. The opening of 320 million mu of wilderness somewhat offset the loss, but there was a net decline in cultivated land nevertheless, amounting to 180 million mu, which meant a loss equivalent to all the cultivated land in the provinces and region.



of Sichuan, Guangdong, and Guangxi. During this same period, China's population increased by 300 million, so there was a steady decline in the ratio of cultivated land to population. Since most of the land used for construction was located in coastal or plains areas or near cities, the loss of cultivated land in these places was even greater. Beijing municipality had a cultivated land area of 9.1 million mu immediately following liberation, but now it has only 6.4 million mu, for a decline within 30 years of 2.7 million mu or almost 30 percent. During the past 10 years, about 20,000 mu of cultivated land has been taken for other purposes each year. If extrapolated over the next 10 years, this will amount to the swallowing up of the Haidian District, which is the first among three large areas producing vegetables for the entire city. Unless drastic measures are taken to stop this trend, the results will be unthinkable.

One of the main reasons for the decline in the amount of cultivated land in our country is the excessive amount used for capital construction and the severe waste in its use. This is manifested principally as follows.

Everyone is a law unto himself, so there is duplication of construction and a waste of large amounts of land resources. In one scenario, once an organization or group is established, it becomes a self-contained body with offices, living facilities, and support facilities that take up a lot of land. In another situation, the overlapping in construction of units for production, goods and materials, and scientific research is very serious. In the production sector it is a case of "old plants have not enough to do, yet more plants will be built anew." In the goods and materials sector, there is overlapping in warehousing, and among scientific research units there is duplication in the introduction in experimental stations. This all creates an alarming waste of land.

The occupation of fine fields of cultivated land while barren land, poor quality land, or empty land is not well used is particularly severe in large cities. In the close-in suburbs where land is scarce and good, numerous units occupy the land and "cannot be pushed out," while in the suburbs a little farther out from the city, no one wants to go. According to the statistics of a Beijing municipal organization concerned, the accumulated amount of land taken over for use by the state in the course of 30 years amounts to 68 percent of the cultivated land, and it is concentrated in the several communes located in the three close-in suburban areas that supply the entire city with fresh vegetables. Rebuilding an old city is a great deal more trouble than building a new city, so everybody "takes a detour," puts aside the rebuilding of the old city, and goes into the close-in suburbs to take over land for new construction. The basic appearance of the urban area has remained the same over the past 30 years while the city has blindly encroached toward suburban areas in a lopsided development that has used up large quantities of fine fields of cultivated land.



By failing to plan in an overall way, and by adopting a piecemeal approach, the working people have lost wealth and the land utilization rate has drastically declined. In the case of use of land to build small-scale projects or a small number of single story houses, examination and approval has not been strict and supervision has been very lax. Some units have taken up a "policy of nibbling," or "using a pick in the east and a spade in the west," caring not one whit for the waste of land, human labor or material resources to build batch after batch of single-story houses. Some planning units permit user units to find land for themselves after which they handle approval of applications. These careless methods both waste land with impairment to early coherence in municipal government projects, and even create redundancy in dismantling and moving.

Still another phenomenon deserving of attention is that an extremely small number of cadres in pursuit of personal enjoyment resort to various "legal" and illegal tactics to abandon the old and make way for the new, vying to build homes and villas, with those in subordinate positions following the example set by their superiors without regard for the waste of good fields and cultivated land. Despite repeated injunctions from the central government, the practice has still not been halted.

Then there is the requisition of a large amount of land for small use or premature requisitioning for delayed use; or taking possession first to get approval later, occupation of more than has been approved, or refusal to give up the land despite lack of approval; or occupying land only temporarily in name but taking long term occupancy in fact. Of the 1.62 million mu of land requisitioned in a certain province during the 12 year period 1966 to 1977, more than half was taken over for occupation without approval.

The state has, in fact, lost control over the use of land by communes and brigades in rural villages. Commune and brigade use of land to operate enterprises, to build houses for commune members, and to bury the dead uses up a lot of land each year, and a great deal of waste takes place in its use. If each of the more than 3 million production teams throughout the country were to occupy a single mu of cultivated land in a given year, that would amount to more than 3 million mu. Over several years the figure would be staggering.

In order to reverse the chaotic situation in land use, actual users and theoreticians should be organized to launch study, application, and thoroughgoing publicity about land economics. Every echelon of leadership organizations and of grassroots units should possess a clear understanding about the seriousness of current land waste and about the urgency of controlling land seizures. The conservation of land and the rational use of land should be a major task in state economic construction, which is given great attention and still more attention. Agricultural and industrial production, as well as all construction projects including those for national defense, should be planned in a unified way with rational use being made of land. Capital construction of rather large

scale together with associated facilities should put into practice the "four unifications," namely; unified planning, unified requisitioning of land, unified construction, and unified allocation. For municipal construction, particularly construction in large municipalities, there should be a formulation at the earliest possible time of an overall plan that sets forth a construction program and stringently controls the size and population of the city.

A "Land Law" should be enacted at once to codify administrative regulations on seizure of land. Responsible government organizations should, in accordance with the principles enunciated in the "Land Law," combine the current state of development of our country's national economy with reform of the administrative system for the national economy, revise methods pertaining to requisitioning of land for state construction, promulgate land management ordinances, and enforce the detailed rules and regulations. Only in this way can there be a law to rely on and a code to abide by to prevent and put a stop to waste and destruction of land resources.

There ought to be a tax on the requisitioning of land. If approved by the national department concerned, occupation of barren land should be exempt from the levy; for occupation of cultivated land, the levy should be great; and for the occupation of the fine vegetable field lands in the close-in suburbs of cities, the tax should be heavy. Commune and brigade construction on cultivated land that has been appropriated should enjoy remission of neither agricultural taxes nor unified state procurement quotas.

The design of civil and industrial construction should particularly emphasize conservation in the use of land. Both large cities as well as medium and small cities should, insofar as possible and within reason, promote multi-story construction. Certain light industrial plants could adopt multi-storied plant buildings, and some warehouses and associated facilities and could be multi-storied structures.

There has to be a strengthening of leadership, establishment of specialized organizations, institution of unified management, a system of echelon by echelon responsibility, propaganda, implementation of state land policies, ordinances, formulation of management regulations and enforcement of codes, approval of a land planning program and its implementation, a system for examining and ruling on applications for land requisition by one's own governmental authority, and investigation and punishment of incidents of serious waste and destruction of land resources.

## DEVELOPMENT OF METHANE IN RURAL AREAS URGED

Beijing RENMIN RIBAO in Chinese 9 May 80 p 2

[Article by Li Fangqian (7812 2455 1730), Chengdu Methane Gas Institute, Ministry of Agriculture: "Actively Develop Methane Gas in Rural Villages"]

[Text] Energy for rural villages, particularly the problem of fuel for daily life, is a major problem urgently in need of solution. Experience has shown that in terms of overall economic benefits, active development of methane gas is a strategic measure for the solution of our country's rural energy needs, is an important energy project, organic fertilizer project, and a sanitation and environmental protection project.

# 1. Current Situation and Problems in Fuel For Daily Life in Rural Villages

A vast amount of fuel is consumed in the daily life of rural villages in our country, an amount that is approximately 85 percent of total energy consumption in rural villages. Of the total consumed, 90 percent comes from biological energy resources including the stalks and stems of crops, firewood, and the manure of barnyard animals, all of which is directly burned. The annual amount totals about 540 million tons. In terms of quantity of heat produced, the burning of this amount of biological energy resources is the equivalent of 310 million tons of standard coal, or one-third of the total energy used nationwide in 1978.

There is, first of all, a serious shortage in the amount of fuel needed for daily life, and although the rate of energy use is extremely small, the amount used is very high. It is estimated that in a single year rural villages throughout the land would require at least 550 million tons of firewood of some kind to satisfy their needs entirely. At the present time, about 60 to 70 percent (more than 300 million tons) of the stalks and stems of plants produced by rural villages throughout the country are burned as fuel. When the coal provided for daily life by the state (about 24 million tons a year), plus firewood is added to this, a shortage of about 300 million tons still exists. For the past 30 years since the founding of the People's Republic, fuel for daily living has been extremely short in rural villages with a shortage of

firewood and grasses existing during 1 month of each year, which is a great burden on commune members' lives. Secondly, the serious shortage and the improper use of fuel in daily life is an important reason for the vicious cycle in the agricultural ecological system, which seriously impairs development of agricultural production. Stalks and stems of plants are an important organic fertilizer and cattle fodder. The burning of stalks and stems throughout the country annually amounts to a loss of about 270 million tons of organic matter as well as large amounts of nitrogen and phosphorous nutrients. With the burning year in and year out of stalks and stems, the material cycle between soil and crops is destroyed so that the fertility of the soil declines. At the same time, the shortage of animal fodder is made even worse. Because of the shortage of firewood, cutting of firewood, digging of grass roots and removal of grass is extremely serious. The forests can have no effective protection and the natural vegetation cover of the soil is extremely damaged. According to statistics, in Sichuan Province the timber resources used for firewood during a single year amounted to between 8 and 9 million cubic meters, or 40 percent of the total amount of timber used throughout the province, and was close to the amount of forest growth for a year. For this reason, solution to the problem of fuel for daily life in rural villages is extremely urgent.

#### 1. Principal Means of Solving the Fuel Problem

If rural villages all over China were to use coal entirely for fuel in their daily lives, more than 250 million tons would be required annually. The state would have to invest between 30 and 40 billion yuan, and the peasants' expenditure to buy coal would amount to several hundred million yuan. Very obviously, this would be difficult to do and it is also unrealistic. Experience has shown that full use of biological energy resources to make methane gas is the main way of solving the problem of fuel for the daily life of rural villages. This employs anerobic digestion techniques to convert the energy stored in organic matter such as human and animal feces, stems and stalks, and weeds into methane gas and process it for use. In rural villages the raw materials for making methane gas are abundant, and they can be regrown. The potential is very great. According to a preliminary estimate, if the feces of people and animals in all the rural villages of the country (exclusive of the feces of sheep and poultry) plus all stalks and stems (excluding animal fodder and industrial raw materials) for 1978 were gathered together, 140 billion cubic meters of methane could have been produced. If even only half of this were used, the fuel needs of rural villages for their daily life could have been satisfied. As agriculture develops and with the growing of energy crops, the raw materials for the production of methane gas will increase in the future. Methane is an inexpensive, easy to obtain, and high energy resource. Methane generating pits in use at the homes of commune members use a prevailing temperature fermentation technique, and ordinary materials are used to build the pit. Equipment is simple; extraction convenient; little money is spent, and most commune

members can operate them. At the same time, there is no need to go elsewhere in search of materials to ferment. The gas is produced locally and used locally, which is well suited to dwellings in rural areas, which are dispersed across the land. In Sichuan rural villages, one household of commune members built a 10 cubic meter methane generating pit at a cost of between 40 and 50 man days labor and an expenditure for materials of about 50 yuan. Once the pit was constructed, by using scientific methods of tending it, methane gas production was virtually sufficient to meet the whole family's needs for fuel. The saving in expenditure for fuel will repay the investment in building the pit within about a year's time. Furthermore, the construction of the generating pit was a one time matter, which can be enjoyed for many years to come. From this may be seen that the making of methane gas in rural villages is a short cut to the modernization of fuel for rural villages.

### 5. Great Changes in the Accumulation and Use of Organic Fertilizer

The declining fertility of the soil is a crucial problem in agricultural production urgently in need of solution. Increased application of organic fertilizer and the return to the fields of stalks and stems are important measures for maintaining and enhancing the fertility of the soil. Very clearly, until such time as sufficient fuel is available to replace the stalks and stems, most places will be unable to take the road of returning the stalks and stems to the fields. Development of methane to solve the fuel problem is a prerequisite for returning stalks and stems to the fields. At the same time, in terms of the rate of use of energy and crop nutrients, once the stalks and stems (with those that can be used as fodder first being fed to livestock), the human and animal feces and weeds have had their methane extracted, they can be returned to the fields in the form of methane gas fertilizer, which is the most economical way of making full use of the stems and stalks and bring about a return to the fields of the stems and stalks. This method both makes sensible use of energy and yields fine quality organic fertilizer. It serves three functions in getting fuel, fertilizer and fodder from the stalks and stems with fullest use and coordination. A 10 cubic meter gas generating pit can provide more than 400 dan of generating pit liquid fertilizer and more than 60 dan of generating pit sediment. In every place where the methane gas extraction was done well, an outstanding increase took place in the amount of organic fertilizer available. Methane gas fertilizer, and particularly the sediment from the methane gas generating pit, contains rather complete nutrients and rather abundant organic matter and humic acid. Experiments have shown that with applications of methane fertilizer, not only do increased yields from crops result, but it improves the physical and chemical structure of the soil to a marked degree. If the soil has an increased content of organic material, complete nitrogen and complete potash, its per unit weight declines, its porosity increases, the mellow soil layer thickens, and the structure gets better.



Development of methane gas is also a change in the method of storing organic fertilizer. When the organic fertilizer sources are tightly packed into the methane generating pit for fermentation, apart from 30 percent of the organic matter that is converted into methane gas, the remainder of the fertilizer components are substantially retained with an improvement in the quality of the fertilizer. According to experiments, when nitrogenous organic fertilizer was stored for 50 days under varying conditions, there was a great difference in the amount of nitrogen loss. In the methane generating pit, however, only 1.1 percent of the total nitrogen was lost. In an open mouth dung pit, the loss was 3.2 percent, and in a pile of fertilizer, the loss was 40 percent.

Through this key link of rural village operated methane manufacturing, a rather complete and mutually reinforcing organic cycle between the crops and the soil is created, thereby creating extremely advantageous conditions for consistently high agricultural output.

#### 4. A Supplement to Fuel For Power in Rural Villages

Currently there is a severe shortage of petroleum and electricity in rural villages with the supply of petroleum for farm machines not being commensurate with the number of machines used for farming. Since energy supplies are inadequate, and stoving equipment lacking, a large amount of grain annually mildews and rots as a result of overcast and rainy weather. Methane gas is a high quality energy fuel. During the past several years, quite a few communes, brigades, and state farms have used methane as their principal energy fuel to operate diesel engines to produce electricity, to process agricultural sideline products, and to pump water etc. with great effectiveness. This is an important measure for solving the inadequacy of energy and electric power in rural villages. Operation of a small scale methane gas power station and power generating station (or small methane power station, for short) requires little investment of capital, simple equipment and technology, short power lines to transmit the electric power, and easy care and maintenance such as most communes and brigades can handle. A survey shows that for each kilowatt from a small methane power station, the investment of capital required is only from one-half to one-third that required for a small hydropower station, and much much lower than for wind power, tidal energy or solar energy for the production of electricity. Construction time is short with only 2 to 3 months being required for it to go into operation, and it is virtually free of the effects of changes in natural conditions. Methane gas operated diesel engines employ the combined combustion of methane and diesel oil in a process currently being promoted. This process can result in savings of more than 70 percent in diesel oil, markedly reducing production costs, and making full use of the benefits of existing stationary machines used in farming.

Development of methane gas production in rural villages is an important overall measure for processing human and animal feces, improving environmental sanitation, and doing a good job in the eradication of scourges and diseases. Additionally, use of the methane fermentation technique to handle the organic waste discarded by cities and industrial plants can both obtain a substantial amount of methane gas to expand the energy resources of the cities, but can also attain the goal of danger-free processing. The potential for cities to operate methane gas production systems is very great.

In short, development of methane gas is an endeavor that offers broad prospects and is an important energy policy. It requires strengthening of leadership, a good job of scientific research, and utmost attention.

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CSO: 4007



## BRIEFS

CATTLE RAISING INCREASES--Beijing, 7 Jul--Cattle raising is being developed in many of China's agricultural provinces and autonomous regions by making use of pasture land on mountain slopes. In east China's Shandong Province, where mountainous area accounts for 70 percent of the total in the province, more than 20 counties and 210 rural communes in the mountainous regions are now mainly engaged in forestry and animal husbandry. Some 900,000 yuan in investment has been appropriated by the prefectural and county authorities in southeastern Shanxi Province this year to purchase semen-freezing equipment for use in cattle breeding. Thirty production brigades in central China's Hubei Province with large tracts of pastures have been switched to animal husbandry, mainly raising cattle, sheep and goats, and been given close to 1 million yuan to buy breeding stock and grass seeds and to improve pasture land. There are over 700,000 hectares of pastures in south China's tropical and subtropical Guangdong Province. A number of fine beef cattle strains, imported from other countries after 1974, are now being bred on local state farms or used to crossbreed with oxen there. [OW080029 Beijing XINHUA in English 1234 GMT 7 Jul 80]

CS0: 4020

# BEIJING STRIVES TO INCREASE MILK PRODUCTION

Beijing BEIJING RIBAO in Chinese 15 May 80 p 1

[Report by Fan Sancheng [5400 0005 2052]: "Beijing Increases Milk Production"]

[Text] In 1979, the total output and the daily output of milk in Beijing Municipality hit the highest mark in local history. From January to April this year, Beijing registered a considerable increase in milk production over the corresponding period of 1979. Despite this increase, Beijing's output of milk is still falling behind the growing demands of the local market.

Early last year, the Changcheng Joint Industrial, Agricultural, and Commercial Enterprise in Beijing and its subordinate milk company took a series of measure to increase milk production in accordance with the instructions of the Beijing Municipal Party Committee and the municipal government. The municipal government has also provided the company and its dairy farms with additional capital in the form of investment and subsidies so that they can increase milk production. It has also provided each milk cow with 4.5 to 5 mu of grazing land and has lowered the ratio of milk output to the amount of feed to be supplied. All dairy farms have put into practice the system of dividing the responsibility for production among the workers and of rewarding those for their good performance. In addition, directors of the dairy farms and their technicians in Beijing have received technical training; their work force has been consolidated and reinforced. The result has been an output of milk that hit a record high in 1979. That year the total output of milk in Beijing was 119 million jin, up 17 percent from 1978; the daily output of milk per head reached 31.77 jin, up 6.6 percent from 1978; sales of fresh milk totaled 8.6 million jin, up 10.4 percent from 1978. During the first 4 months of this year, the total output and the daily output of milk exceeded the corresponding period of 1979 by 6.12 million jin and 50,000 jin, respectively. The daily output of milk per head was 35.6 jin. If milk production continues to increase at this rate, we can anticipate an increase in the average annual output of milk per head from 5,800 jin last year to 6,400 jin by the end of this year. Inspired by the four-point proposal

of the Secretariat of the Party Central Committee concerning the administration of Beijing Municipality, the Changcheng Joint Agricultural, Industrial, and Commercial Enterprise and its subordinate dairy farms have taken measures to open additional milk supply outlets for the benefit of the masses, and to alleviate shortage of milk in the city.

9574

CSO: 4007

## BEIJING

### PEASANTS IN BEIJING URGED TO INCREASE PRODUCTION

Beijing BEIJING RIBAO in Chinese 17 May 80 p 2

[Report by Yin Zhensheng [1438 2182 5116]: "Beijing Suburbs Push Nonstaple Food Bases"]

[Text] The Beijing Municipal People's Government recently held a work conference calling on industry to support agriculture in accordance with the four-point proposal of the Secretariat of the Party Central Committee concerning the administration of Beijing Municipality.

The conference was attended by Jia Tingsan [6328 1656 0005], third secretary of the Beijing Municipal Party Committee and chairman of the Standing Committee of the Beijing Municipal People's Congress; and Chen Xitong [7115 1585 0681], vice mayor of Beijing Municipality.

Comrade Jia Tingsan addressed the conference. In addition to conveying to the conference the aforementioned four-point proposal, Comrade Jia Tingsan called on industrial enterprises in Beijing to further strengthen their support for agriculture. Other speakers included responsible comrades of the Changkong Machinery Plant and the Beijing Municipal Machinery Bureau who conveyed to the conference their experiences in supporting agriculture in 1979 and similar plans for this year, a responsible comrade from the Pinggu County Party Committee who reported his county's successful experiences in getting factories to cooperate with communes in promoting agricultural production, and representatives of the Beijing Motor Vehicle Company, the Beijing Heavy Duty Electric Machinery Plant, the Beijing General Internal Combustion Plant, Liulihe commune of Fangshan County, Dahuashan commune of Pinggu County and other units.

During the conference, 122 advanced collectives, including the Beijing Television Equipment Plant's "support agriculture" team, were commended for their achievements in supporting agriculture. Also commended were 127 advanced individuals, including Ma Lianfang [7456 5114 5364] of the Beijing Heavy Duty Machinery Plant's "support agriculture" team.

The conference also reviewed the work performed by various plants in Beijing during the campaign for industry to support agriculture in 1979. By the end of 1979, the number of plants which had helped the communes and brigades promote agricultural production increased to 452, from 380 in the early 1979's; 1,400 workers were assigned by plants to help communes and brigades speed up the mechanization of agriculture, develop hilly areas, and promote sideline production. These workers now form a reliable technical force for realizing the modernization of agriculture in the Beijing suburbs.

The conference stressed: The Party Central Committee is deeply concerned with the development of the capital of China. We must thoroughly implement the four-point proposal issued by its Secretariat, which marks a new stage and a turning point in the development of China's capital. In addition to successfully building the city, we must encourage industry to strengthen its support for agriculture so that we can build the Beijing suburbs into a nonstaple food base capable of adequately supplying our city with vegetables, meat, eggs, and other nonstaple foods. Only in this way can we help the communes and brigades on the outskirts of Beijing--and especially those located in hilly areas--to change their condition of poverty.

The conference also stressed the need to mobilize all trades and professions to support agriculture and further strengthen cooperation between factories and communes. The conference concluded with following suggestions: (1) The leaders of all districts, counties, bureaus, companies and industrial and mining enterprises under the jurisdiction of Beijing Municipality and their "support agriculture" teams must regard their efforts to support agriculture as part of our party's consistent policy and a glorious task for industry. In the future, they should list "support agriculture" as an item in their annual reports on evaluation of performances of industrial and mining enterprises. (2) They must help communes develop and utilize local resources, grow industrial crops, expand fish-breeding grounds and poultry farms, the building materials industry, the food processing industry, and small enterprises designed to serve the needs of giant industrial enterprises and people in the city. Only by so doing can they broaden the prospects for supporting agriculture. (3) Continuing efforts must be made to strengthen the contingent of those who support agriculture. So far, the factories and enterprises which have cooperated with communes in promoting agricultural production account for 30 percent of all the enterprises in Beijing. The numbers of factories assigned to support agriculture by bureaus and companies are not well balanced. For example, over 50 percent of the plants under the bureaus of machinery, instrument, and metallurgy and auto industry have been assigned to support agriculture, while the number of plants assigned by other bureaus and companies to do the same job is small. We must tap the potential for expanding our aid for agriculture year after year, and help communes on the outskirts of Beijing develop enterprises which will unite agriculture, industry and commerce in an effort to diversify their economies. (4) We must effectively strengthen our leadership

over the "support agriculture" activity. Each of the bureaus, companies, and their general factories should select at least one of its leading cadres to take charge of this "support agriculture" operation, while each of the districts and counties on the outskirts of Beijing should appoint at least one of its deputy secretaries or vice chairmen as coordinator in this field. Each of the districts, counties, and bureaus must help those communes and brigades which have prospered through cooperation between industry and agriculture to sum up their experiences and use them to guide the overall "support agriculture" activity. Only in this way can we bring to a successful conclusion the campaign for the support of agriculture by industry.

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## BEIJING

### RICE PRODUCTION TO BE INCREASED IN BEIJING SUBURBS

Beijing BEIJING RIBAO in Chinese 13 May 80 p 1

[Commentary by BEIJING RIBAO correspondent: "Beijing Suburbs Seek To Raise Rice Output"]

[Text] The Beijing Municipal Party Committee and the municipal people's government have decided to increase rice production in order to meet the growing need for food.

China has to its credit over 4,000 years of experience in growing paddy rice. It was generally believed that Beijing's experience in growing paddy rice dates back to the early years of the Eastern Han dynasty. According to the "Book on the Later Han Dynasty," during the reign of Emperor Guangwu, Zhang Kan [1728-1030], magistrate of Yuyang County, and a man well educated in military and political affairs, taught people in Hunu, today's Xiaoying commune in Shunyi County, to grow paddy rice. It can be said that Beijing's experience in growing paddy rice dates back 1,900 years. Before liberation, the rice-growing area on the outskirts of Beijing was small and its output per unit was low under the influence of the small-scale peasant economy. Since liberation, irrigation systems have been built on the outskirts of Beijing, and peasants there have been organized to develop the collective economy and promote rice production. Rice produced in the Beijing suburbs is known for its good quality, tastefulness, and high yield. For example, in 1970, the rice-growing acreage in Beijing suburbs accounted for only 12 percent of the farmland and the output of rice was 23 percent of the total output of foodgrain crops; in 1975, the rice-growing area accounted for 6 percent of the farmland and its output was 10.6 percent of the total output of foodgrain crops.

However, the plan for expanding rice production in Beijing suburbs has also encountered some difficulties. Rice production there began gradually to resume in 1949. In 1971, over 960,000 mu of land in Beijing suburbs were planted with rice. But the rice-growing acreage decreased to 300,000 mu of land as a result of the prolonged drought that hit Beijing in 1972 and 1973. From 1974 to 1979, the rice-growing acreage increased from 300,000 mu of land to over 700,000 mu of land. Despite this increase in rice-growing acreage, the output of rice remains unstable.



Our past experiences remind us of the need to stabilize the rice-growing acreage in the Beijing suburbs and to increase the output of rice per unit.

There are nearly 1 million mu of alkaline soil in the Beijing suburbs which are suitable only for growing rice. More irrigation water is needed to transform all the 1 million mu of land into paddy fields. This year, the rice-growing acreage is expected to increase from last year's 700,000 mu of land to over 800,000 mu of land. Facts show that irrigation water has been wasted, because 700 cubic meters of water are needed to irrigate only 1 mu of land. In other words, 1 cubic meter of water is required to produce 1 jin of rice. In the future, we must improve our irrigation techniques, economize on the use of water, and adopt new methods for planting rice seedlings in dry fields in order to increase rice production.

The key to success in increasing rice output per mu of land lies in the cultivation of rice seedlings as early as possible. Paddy rice is a crop which ripens early in warm weather. Generally speaking, high temperatures induce rice to ripen early, while low temperatures will cause a lower yield. For example, in 1975, a warm year in which the cumulative temperature from 15 June to 30 September totaled 2,661 degrees, the output of rice averaged 719 jin per mu of land; in 1979, a low temperature year in which the cumulative temperature from 15 June to 30 September was 2,436 degrees, rice output averaged 300 jin per mu of land. We must start cultivating and planting rice seedlings as early as possible so that the crop can ripen early in the warm weather. Investigations have revealed that a cumulative temperature of 900 degrees is needed to enable paddy rice to grow from the formation of heads to harvest. For example, increased output can be expected if the heads form on 30 August and the cumulative temperature reaches 944 degrees by 5 October; the output of rice is certain to drop if the heads form on 25 August and the cumulative temperature reaches only 880 degrees by 5 October. According to the weather forecast, during the coming summer and autumn the temperatures will be higher than the corresponding period of 1979, although 1980 remains a low temperature year.

During the coming autumn, the cumulative temperature will range from 2,450 to 2,500 degrees, down nearly 70 degrees from the normal year. Wheat is expected to ripen 3 to 5 days later than usual during this cold spring, in which the cumulative temperature is expected to drop by 70 to 100 degrees. For this reason, we must work out a tight schedule for seed selection and seedlings cultivation in order to insure that the rice heads will form before mid-August and will ripen in good time. In order to achieve our intended goal, we must avoid transplanting early rice seedlings in June, and complete the transplanting of middle rice before 10 June and late ripening rice no later than July.

In addition, we must practice close planting, improve fertilizer spreading techniques, and control insect pests.

As long as we practice scientific farming and insure the successful implementation of all necessary key measures, greater success in rice production in the Beijing suburbs will await us during the coming autumn.

## FUJIAN FIRST SECRETARY SPEAKS AT PLANNING CONFERENCE

HK110525 Fuzhou Fujian Provincial Service in Mandarin 1035 GMT 9 Jul 80

[Text] In the recent provincial conference on long term planning and [words indistinct] (? meeting) of the prefectural and municipal party committees, first secretary of the Provincial Party Committee Liao Zhigao introduced to the participants in the meeting the experience of (Chengdan) commune, Nanan County in allocating a portion of the hilly land of the commune and brigade for production teams to build tea plantations and orchards and vigorously helping production teams to become rich.

(Chengdan) Commune in Nanan County has a total cultivated area of more than 30,000 mu and per capita distribution of cultivated land is 0.43 mu. It has more than 117,000 mu of hilly land making a per capita average of more than 1.6 mu.

The question of the policy on hilly lands had not been solved in the past. Therefore, even though 80 percent of production teams are located near hills, hilly lands were not distributed to them. This affected the commune members' enthusiasm in cultivating hilly land.

After the smashing of the gang of four, in accordance with the peculiarities of the commune, the commune party committee made the following rule: a suitable proportion of hilly land belonging to the production brigade must be allocated to the production teams for them to build tea plantations and orchards. The ownership of these lands is not to be changed and the lands are to be used by the production teams permanently. Commune members are to be allowed to plant fruit trees in their courtyards and such trees will belong to them permanently.

The commune stressed that the commune, brigade and production teams can all engage in developing tea plantations and orchards, but emphasis must be put on the production teams.

Furthermore, the commune also helped the production teams to run their tea plantations and orchards well by providing assistance in terms of funds, technology and seedlings.

Because the policies were vigorously implemented, the development of a diversified economy in this commune was very fast. It achieved remarkable results. At present, aside from the commune and 18 production brigades which had built tea plantations and orchards, there are 241 production teams throughout the commune--representing 64.8 percent of the total number of production teams--which already have their own tea plantations and orchards. Among the more than 70,000 mu of barren hills in the commune, 38 percent have been planted with tea, fruit trees and bamboo and forests have been set up.

In the past 3 years, income from tea plantations, orchards and forestry products amounted to 2 million yuan.

Comrade Liao Zhigao thinks that the experience of (Chengdan) commune, Nan'an County is a good way to accelerate the development of a diversified economy. If the whole province does as well as (Chengdan) Commune, Nan'an County, it is totally possible for Fujian to become rich in a short time.

CSO: 4007

## MEETING PARTICIPANTS DISCUSS RURAL WORK TASKS

HK170459 Fuzhou Fujian Provincial Service in Mandarin 1035 GMT 16 Jul 80

[Excerpts] The Fujian Provincial CCP Committee and people's government convened a meeting of responsible comrades of provincial departments concerned on 14 July to study and arrange production and work in the next stage. The meeting called on the province to make ever greater efforts, grasp crash-reaping and sowing as the current overriding central task in the rural areas, go all out to do a good job of summer reaping and sowing, and strive to fulfill the year's plan for increasing agricultural output. Comrade Ma Xingyuan, secretary of the provincial CCP committee and governor, took part in the meeting and spoke.

The meeting proposed that the first task in doing a good job of crash-reaping and sowing is to concentrate forces to crash-reap early rice on time. Secondly, it is necessary to fulfill the task of sowing 16 million mu of late rice, completing the task on time and up to the mark in quantity and quality. In particular it is necessary to sow well the 6.85 million mu of hybrid rice. The province must basically complete the transplanting task by 1 August.

The meeting pointed out: Although the situation of early rice production is relatively good, there are great discrepancies compared with the demands of the plan for increasing production. This is due to natural disasters, especially drought. Hence we must absolutely not slacken grain production. We cannot set grasping diversification against grasping grain production. We must fully tap the favorable conditions in all parts of the province and do everything possible to sow more or inter-plant autumn corn and other miscellaneous grains, striving to sow more and reap more.

The meeting held: The time is very pressing in summer reaping and sowing this year, and there are only about 20 days available for the work. Hence it is necessary to strengthen leadership and fully mobilize the masses to fight well the battle of crash-reaping and sowing. Over 40 percent of the population must engage in this battle. The province must reap and sow 1 million mu a day.

CSO: 4007

## FUJIAN

### BRIEFS

FUJIAN PREFECTURE DROUGHT--In the past few days, the people in Longxi prefecture have mobilized 400,000 laborers, 4,100 water pumps and 53,000 water cars, wooden barrels, buckets and other drought-resisting tools to crash repair water conservancy projects in 3,300 areas. The leadership at all levels has led the office cadres to the first line of drought resistance to direct and take part in the fight. [Fuzhou Fujian Provincial Service in Mandarin 1035 GMT 3 Jul 80]

CSO: 4007

HONG KONG PAPER REPORTS ATTEMPT TO DISSOLVE COMMUNES

HK161123 Hong Kong HONG KONG HSIN PAO [HONG KONG ECONOMIC JOURNAL] in Chinese 12 Jul 80 p 3

[Article by Hsia Lin: "Will the Communes Be Dissolved?"]

[Text] Recently, it has been widely rumored in Guangdong that the people's communes will soon be dissolved. Foreign reporters in Beijing in fact also gave the same reports about the possible abolition of the people's commune system. However, these have not yet been confirmed by the government authorities.

The Beijing and Guangdong provincial authorities have remained silent over this widespread rumor and adopted an attitude of "neither confirming nor denying" it. Nevertheless, there is one confirmed report. A commune in Taishan District, Guangdong Province, the home of many Overseas Chinese, began dividing up the fields from the middle of last June. The commune once again returned to the peasant households the land which was distributed to the peasants during the land reform in 1952. The land was incorporated in 1957 when Guangdong began its agricultural collectivization. By the time the people's communes were established, the peasants had completely lost their title to the land.

I have personally read two family letters sent respectively from Taishan and the outskirts of Changsha in Hunan. The sender of the letter from Taishan urged his younger sister in Hong Kong to remit 500 yuan to him as quickly as possible. It was noted in the letter: "Since the distribution of land in the middle of June, Father's and your land has been allocated and is now under my name. My son is still in northeast China and there is thus not enough manpower in our household. If we do not cultivate our land, it will be allocated to other people. If we hire other people to cultivate the land for us, we will have to pay a daily wage of 4 yuan. We will not be able to sustain this for long. Please remit 500 yuan to me as quickly as possible so that I can purchase an ox to meet our pressing needs."

To his son in Hong Kong, the sender of a letter from Changsha said:  
"The purchase of a small truck which we previously talked about has now been dropped. We were recently notified that there will soon be a distribution of fields. Your mother and I will not be able to leave for Hong Kong for the time being. So we are not donating a small truck to the commune..."

Judging from the two letters, the rumors about dividing up the fields which are widespread in Guangdong seem to be fact. The fact that the government authorities remain silent just means that it is currently not yet time for an official announcement of the dissolution of the people's communes. They are still retaining the names of the communes but are trying to restore the rural production relations to their original state before the agricultural collectivization. Since it is not known at present whether this will lead to an increase in agricultural production, the government authorities have adopted a very prudent policy and will not at the moment officially announce the dissolution of the communes. Nevertheless, in at least two communes, the commune system exists in name only.

This practice is in keeping with the call to "enliven the economy" repeatedly put forth by Zhao Ziyang. The substance of "enlivening" in fact includes allowing different systems of ownership to coexist. So long as there is no exploitation, people are allowed to adopt all measures which are beneficial to the economy. As different systems of ownership are allowed to exist together, they should certainly include private ownership; and all measures should also include "revisionist" and capitalist measures, so long as they do not violate the major premise of the prohibition of exploitation.

CSO: 4007



## BRIEFS

SHAOGUAN PREFECTURE DROUGHT--Recently, the counties in Shaoguan Prefecture were resisting drought. Since June most areas have not received any heavy rain and drought is worsening. Some 400,000 mu of early rice were affected, while 300,000 mu of economic crops were also affected. Another 10,000 mu of late rice seedlings were affected. The prefectural CCP committee and the county CCP committees have recently held telephone conferences and issued emergency circulars to mobilize the people throughout the prefecture to rapidly plunge into the struggle of resisting drought. In Yangshan County, 6,000 cadres have been transferred to the countryside to lead 70,000 laborers to resist drought. Some 1,600 medium and small water conservancy projects have been repaired, thereby improving the drought situation in over 53,000 mu of crops. [Guangzhou Guangdong Provincial Service in Mandarin 2345 GMT 6 Jul 80 HK]

CSO: 4007

PROVINCIAL GOVERNOR PUTS FORTH INSTRUCTIONS ON FRUIT PRODUCTION

HK170244 Shijiazhuang Hebei Provincial Service in Mandarin 0430 GMT  
8 Jul 80

[Excerpts] Recently, at the Hebei provincial fruit conference Governor Li Erzhong put forward seven points for getting started on improving fruit production and marketing, solving problems of low income among peasants in the fruit-growing areas, lack of good fruit for consumers and deficits in commercial departments. The seven methods raised by Li Erzhong to improve fruit production and marketing are:

1. We must cultivate and tend fruit trees well. Yields of fruit trees in the province are low. We must first stimulate the peasants' enthusiasm to cultivate and tend the fruit trees well in order to increase output. All places should extensively popularize the experience of Zhao County in organizing specialized fruit production contingents; secondly, we must train the members of the specialized contingents, and help them to grasp the techniques of fruit tree management. Furthermore, the orchards should be engaged in diversified economic undertakings and become bases of diversified economy.
2. We must do well in storage. When we have orchards, we must prepare warehouses for their output. The size of the warehouses must be appropriate to the size of the orchards and the output.
3. We must practice joint management and open every avenue to jointly promote the sale of fruit and produce enough to meet the market demands. Besides supply and marketing cooperatives helping the production teams to sign contracts and have direct contact with the consumers, communes and brigades in fruit areas should be organized to promote sales jointly.
4. To practice joint management, we must do well in organizing processing. From now on, we must prepare to build fruit processing factories to produce fruit juice, preserved fruit and fruit wine. The commune and brigade enterprise bureaus should be organized to study this.

5. The communes and brigades in fruit areas should pack fruit themselves. One of the reasons why we lose money in fruit is that packaging is not good enough. To promote fruit sales, we must treat packaging as a separate business.

6. We must organize transportation. Some rich production teams are rich enough to organize a transportation team. We should also organize some cold storage transportation teams.

7. Concerning the prices, we should strictly differentiate fruit purchasing prices for home and foreign trade. We must implement the policy of higher price for better quality.

CSO: 4007

## ENSHI PREFECTURE ENLIVENS MOUNTAIN AREA ECONOMY

HK170706 Wuhan Hubei Provincial Service in Mandarin 1100 GMT 15 Jul 80

[Text] Starting from the actual local conditions of few people inhabiting a vast mountain area, many varieties of products but low income, Enshi Prefecture has relaxed policies to enliven the mountain area economy. This is enthusiastically supported by the masses. Through investigations, summing up and analysis, Enshi Prefectural CCP Committee realized that there are great potentials in the present policy. So long as we can really get rid of the ultraleftist policy which binds the peasants' freedom of action, the development of agricultural production will boom tremendously. Enshi Prefectural CCP Committee decided to start off from the actual local situation, appropriately relax the policy and try every way to mobilize the enthusiasm of the peasants.

1. The question of rights. The prefectural CCP committee has decided that under the premise of carrying out the policy and laws of the state and accepting the guidance of the state's plan, in future the production, management, administration and distribution of the production teams will be completely handled by themselves. The upper levels will only stipulate output targets for agricultural and sideline products, together with the procurement quotas. The production teams will decide themselves what to grow and how to grow it. After completing the quota stipulated by the state, the production teams can deal with the surplus products themselves.

2. Give play to full responsibility. We can practice production quota for each field, responsibility for each person and calculating payment linked to production in scattered plots of land and small-quantity crops. On the basis of state monopoly for purchase and marketing, in large-quantity [word indistinct] crops we can assign responsibility to individuals for tending them and calculate payment linked to output. A few poor teams can practice fixing output quotas for each work group or household. We can allocate some marginal scattered plots of poor land, and plots of land around houses to commune members as land for fixed-quota production [words indistinct].

3. Grasp cash. After all places have achieved grain self-sufficiency and surplus, we must devote major energy to developing diversified economy to increase income. The prefectural CCP committee will gradually reduce or waive grain procurement quotas in the concentrated diversified economy areas. We must practice exchanging grain for livestock and indigenous products in high mountain areas where there is shortage of grain. We must carry out readjustments of grain surpluses and deficiencies in the prefecture and support the production of diversified economy. As for household sideline production, we must give our support and promote its development; we must allow craftsmen to go around plying their trades. Communes and brigades can process wooden or bamboo products. We must practice returning profits from the procurement of the agricultural and sideline products, so that most profits will be returned to the production units.

4. Enliven distribution. The prefectural CCP committee has decided to promote the method of grain distribution according to work points while at the same time considering special cases. Even distribution per head will be eliminated for food other than grain; such food will be bought with cash instead.

Since the Enshi Prefectural CCP Committee has practiced these policies, the peasants' enthusiasm has become unprecedentedly high and this is beneficial to promoting current production. This year, agricultural work in the prefecture has been done better than in past years. The cadres and masses are full of confidence for reaping a bumper harvest this year.

CSO: 4007

## BRIEFS

**HUNAN PREFECTURE HYBRID RICE**--In 1980, the areas sown to late hybrid rice in Chenzhou prefecture increased from 1.6 million mu in 1979 to 1.9 million mu in 1980, accounting for 81 percent of the total areas sown to late rice. There is sufficient sunlight and rain in this prefecture. These are the superior natural conditions for growing hybrid rice. The prefecture began to grow late hybrid rice in 1974. In 1979, the average per mu yield of late rice was 500 jin, doubling that of conventional late rice. [Changsha Hunan Provincial Service in Mandarin 1100 GMT 1 Jul 80]

CSO: 4007



## BRIEFS

**ECONOMIC TARGETS FILLED**—The 289 communes in Nei Monggol's pastoral areas successfully fulfilled the economic targets for the 1979 animal husbandry year (mu ye nian du). Compared with 1978, their total income increased 13.5 percent, the number of livestock rose by 10.9 percent and the collective reserved funds went up by 10.4 percent. The herdsmen's income received from the collective averaged 127 yuan per capita. The total amount of the herdsmen's consumption increased 2.6 percent and their labor productivity rose by 13.6 percent above the 1978 records, while the operating expenses dropped by 2.2 percent. [Nei Monggol Regional Service in Mandarin 1100 GMT 10 Jun 80]

CSO: 4007

**BRIEFS**

**PUMPING STATION COMPLETED**--An electric pumping station in (Anquan) commune, Ninghe County, Qinghai Province, was completed recently and has been put into operation. The pumping station has a capacity of irrigating 3,000 mu of dryland. [Xining Qinghai Provincial Service in Mandarin 2330 GMT 7 Jun 80 SK]

CSO: 4007

## 'SICHUAN RIBAO' COMMENTS ON COMMUNE AND BRIGADE ENTERPRISES

HK130737 Chengdu SICHUAN RIBAO in Chinese 23 Jun 80 p 1

[Editorial: "Commune and Brigade Enterprises Must Enjoy Unswerving Great Development"]

[Text] During recent years, the development of commune and brigade enterprises in the province has been relatively fast, and they now occupy a certain position in the national economy. However, the standard of development is still relatively backward compared with the whole country because of the past weak and poor foundation and the slow start. At the same time, there are new problems which urgently need solution on the road of advance. In face of this situation, we must further emancipate our minds, be capable of thinking and eager to investigate, seriously solve the problems existing in the work, and stimulate commune and brigade enterprises to advance continuously in the direction of great development.

The importance of developing commune and brigade enterprises is very clear. Some advanced regions and units in the province have shown by their experiences that if we do well in running commune and brigade enterprises, the local natural resources can be fully utilized and capital can be accumulated faster, thus promoting speedy development of agriculture and making the rural areas get rich as soon as possible, while the peasants' living standard will be improved gradually. Therefore, to devote major energy to developing commune and brigade enterprises and practice joint undertakings of agriculture, industry and commerce is definitely not an expedient measure, it is the essential way for carrying out agricultural modernization and is an important topic to be considered and solved on the road of Chinese-style modernization.

Sichuan has a vast territory, abundant resources and mild climate; its conditions are very good. So long as we can fully bring into play the superior features, and pay attention to grasping the foundation, the focal points and the key points, we will be able to change the present situation in which our commune and brigade enterprises lag behind advanced provinces and regions, and can be among the advanced in the

country. According to the statistics of the departments concerned, the diversified economy in Sichuan has six superior features: silkworms, oranges and tangerines, tea, oil from woody plants, rapeseed, and hydro-electricity; however, there are weak links of pasture animals and forestry. At present, the superior feature of silkworm production has started to be brought into full play. Tong seed was originally a superior feature of the province, however it was not developed; on the contrary, it is declining. The 24 million mu of aquatic product breeding areas in the province are poorly utilized. The output of hemp accounts for one-fifth of the total in the country. There are good prospects in developing hemp processing. All these things indicate that as long as we can suit our measures to local conditions, bring into play the superior features, grasp well the weak links and devote major energy to developing cultivation and breeding, then we will surely be able to provide richer material foundations for commune and brigade enterprises. When we first start to grasp well the foundation of cultivation and breeding, we must base our work on the needs of developing the national economy, take agricultural and sideline products processing, construction materials, light and textile industries, articles made of bamboo, wood, palm and rattan, and coal, small high-grade ore and small nonferrous metal mines, panning and so on as the focal points of developing commune and brigade enterprises, and seriously grasp them well. Due to the efforts of the past few years, there are already 140,000 commune and brigade enterprises in Sichuan. To do well in tapping potentials, innovating and reforming the present enterprises, and succeed in producing effective and beneficial results from little investment is the standpoint of achieving greater, faster, better and more economical results in commune and brigade enterprises, and insuring the fulfillment of the production plan in 1980, it is also the current key to grasping well the commune and brigade enterprises. At the same time, we must grasp firmly and well the construction of the essential new projects, fill up the gaps in the projects under construction, and strive to complete construction of a number of enterprises and put them into production in 1980, to bring the effects and benefits into full play. All places can devise more ways to add some small projects which can produce immediate results. There are great potentials in this respect.

If commune and brigade enterprises are to enjoy great development, we must pay great attention to the continuity and stability of the party's policy, unswervingly implement the series of principles and policies of the central authorities and the provincial CCP committee for enlivening the rural economy and devote major energy to developing commune and brigade enterprises. We have just started to enliven rural economic work, but the work is not fast enough, and in a word, it is not lively enough. We must broaden our thinking, enliven our methods a bit, strengthen leadership, seriously sum up and popularize experiences and promote commune and brigade enterprises in a planned and systematic way.

One of the important measures for currently enlivening commune and brigade enterprises is to grasp well the work of supply and marketing in order to guarantee raw materials for commune and brigade enterprises and channels

for their output. We must try every way to put this in the plans at all levels, striving to expand regulation by planning mechanism; on the other hand, we must make it very clear that for a considerable time to come, regulation by market mechanism will still be the main thing. It is necessary for supply and marketing work to closely keep up with the great development of commune and brigade enterprises. At present, more than 1,000 communes in the province have established supply and marketing departments, which have promoted the production of commune and brigade enterprises, and enlivened rural economy. This orientation is correct. Some supply and marketing management departments practiced wrong methods for a time, but it is alright if they are corrected. We should not repeat the practice of "chaos once restrictions are relaxed, restriction once there is chaos, and closure once restriction is imposed." Instead we should strive to organize a number of supply and marketing management departments this year, and seriously do it well. Supply and marketing organizations of commune and brigade enterprises at all levels should aim at organizing and promoting production, promptly find out the situation of the market, and organize the enterprises to produce products which satisfy needs. Moreover, they can make use of fairs, sell by mail, consignment, or agency, participate in material redistribution, organize material exchange and market their products elsewhere and so on, to open up all channels for production and marketing.

While developing commune and brigade enterprises, we must devote major energy to promoting the practice of various joint enterprises and joint management. At present, the commune and brigade enterprises in the province are generally small in scale, with obsolete equipment and backward technology. By practicing joint undertaking, this situation can be changed faster, and we can better bring individual superior features into full play, fully utilize the natural resources, mobilize the enthusiasm of all quarters, solve the problems concerning capital, raw materials, equipment, technology and so on and raise market competitiveness. This is beneficial not only to the development of commune and brigade enterprises, but also to reforming the rural agricultural structure, so as to enliven rural economy. It has profound significance for narrowing the differences between industry and agriculture and between town and country, and consolidating the worker-peasant alliance. The joint-managed enterprises should be established on the basis of voluntarism, equality and mutual benefit. We must persist in the following three principles: 1) promote the mutual benefit policy; 2) independent accounting with sole responsibility for profits or losses, and 3) units participating in joint management must be genuine masters of the enterprises, all important issues of the enterprises must be discussed and decided by the participating units.

We must also pay attention to grasping well the distribution of profits and improving management while developing commune and brigade enterprises. The distribution of profits in commune and brigade enterprises is related to every enterprise and every person and it involves the vital interest of the production teams. To correctly handle the relationship between accumulation and distribution is very important in guaranteeing the

fulfillment of the production plants for the year, and promoting the consolidation and development of commune and brigade enterprises. All places should be liberated from influence of the ultraleftist line that puts emphasis on accumulation and disregards consumption, and change the situation in which attention is only paid to expanded reproduction and "snowballing," while the production teams and commune brigades do not get material benefit. We must persist in implementing the rules of the relevant documents of the State Council, the provincial CCP committee and people's government, and insure that the enterprises retain profits as appropriate and the production teams receive profits in proportion. In managing joint undertakings, we must enthusiastically popularize the system of job responsibility of "quota, contract, reward," and link the results of enterprise management to vital economic interest of the enterprise personnel (including the managing cadres). We must encourage the workers of commune and brigade enterprises to try hard to raise the quality of products and lower production costs. Commune and brigade enterprises should strictly manage finance and capital, and keep financial affairs open. Moreover, we must practice selection of the best commune members to work in the enterprises, grasp well the training of managing cadres of commune and brigade enterprises, and pay attention to promoting cadres who are energetic, capable of doing business, and who are in the prime of life to leading positions, we must give them a free hand in their work and fully bring their intelligence into play in order to suit the needs of the great development of commune and brigade enterprises.

CSO: 4007



## RECLAMATION PROJECTS THREATEN EXISTENCE OF BOSTEN LAKE

Beijing GUANGMING RIBAO in Chinese 7 Jul 80 p 2

[Article: "The Natural Resources of Bosten Hu Should Be Exploited and Protected to the Fullest"]

[Text] Located in the southeastern part of the Yanqi Penti in Xinjiang, Bosten Hu is China's largest inland fresh water lake, having an area of 988 square kilometers. The Kaidu He, a large river on the southern slopes of the Tian Shan, empties into the lake, which also serves as the headwaters for the Konqi He. The lake contains 9.9 billion cubic meters of water. Evaporation accounts for some 1.6 billion cubic meters of water a year from the lake's large expanse, which has a moderating effect on the region's continental desert climate. Bosten Hu has rich rush and fish resources; 40,000 tons of rushes can be produced a year, which makes it one of China's major producers of rushes. Today, however, only about 13,000 tons can be made use of. Bosten Hu is also the site of one of the two big fishing operations in the autonomous region, producing 2,000 tons of fish a year and there is great potential for economic expansion.

For some time, it has been observed that because of the great amount of desert wasteland that has been reclaimed upstream on the Kaidu He, the volume of water flowing into the lake has been reduced, which in turn has caused the level of mineral content in the water to rise as a result of the increased intake of alkaline waters upstream. According to measurements, each jin of lake water contained 0.37 grams of minerals in 1958. This had grown to 1.56 grams by 1978. In fact, Bosten Hu has already become slightly saline. Moreover, there is no unified management structure for the lake's resources, and there is no control over the lake's rush situation. It is the same with the fishery situation. Because of the damage done to the spawning grounds along the shores of the lake, the free breeding of fish has been adversely affected.

Especially alarming is the fact that for the last 2 years now, the region's agricultural organs, in order to treat the alkaline soil and expand irrigation, have built water diversion projects on the Kaidu He so that as soon as the water enters one corner of the lake from the Kaidu He, it flows into the Konqi He, further decreasing the volume of water flowing into the lake.

Also, they have planned two pumping stations (one has been completed). If these two pumping stations begin to lift water, the water level in Bosten Hu will drop by about 5 meters and the area of the lake will be reduced by two-fifths. The salinity will increase and the rush and fishing industries will be sharply curtailed. The State has decided to build a large paper mill here whose raw material sources will create a problem. Because of the lake's reduced surface area, and the reduced evaporation, the climate in the region will become even dryer, posing a great threat to the ecological balance.

The comrades of the organs of light industry and aquatic production in the Uygur Autonomous Region believe that the situation which has unfolded in this area comes down to two major questions: one, how to protect the ecological balance in the region; and two, how to develop the area's superior rush and fishing resources. They have appealed to the concerned leadership organs' scientific and technical personnel to work jointly with the comrades of concerned organs to undertake a serious survey of the area. Beginning with the two basic questions of the ecological balance and the full development of the local natural resources, they want to choose practical measures and have an overall plan to organize agriculture, fisheries and subsidiary agricultural production. As to the natural resources of Bosten Hu, a specialized structure must be set up to carry out unified management and to fully use and protect these resources.

CSO: 5000

## ZHEJIANG SUCCEEDS IN FIVE FARM ENDEAVORS

Beijing RENMIN RIBAO in Chinese 9 May 80 pp 1-2

[Article by correspondents Shen Shiwei [3088 0013 4885] and Yu Yunda [5713 0061 6671]: "Five Endeavors Thrive in Zhejiang's Rural Villages"]

[Text] In 1978, Zhejiang Province began various endeavors, all five of which have thrived. They actively and steadily readjusted agricultural patterns as they existed, and while vigorously developing grain production, they also adapted methods to the local situation to develop the forestry, livestock, and fishing industries, and to the development of economic crops, as well as to develop various kinds of businesses.

Zhejiang Province, with 70 percent of its territory in mountains, 1 percent in water, and 2 percent in farmland, possesses abundant natural resources. But as a result of the disturbance caused by the ultra-left line of Lin Biao and the "gang of four," the rational structure of its agricultural economy suffered serious damage. Of the province's 66 varieties of major agricultural sideline products, 44 suffered serious decline in production with some being produced in lower quantities than immediately following liberation. In 1978, output value of the forestry industry stood at only 2.6 percent of the total output value of agriculture. The livestock industry stood at only 12.5 percent, and the fishing industry at only 4.6 percent.

In Jiaxing Prefecture, for example, more than 140 different kinds of things were sold in the past, but during the past several years, as a result of the one-sided emphasis in some places on taking grain as the key link, many mulberry groves were destroyed and fishponds were filled in to make grain fields. As a result, a serious decline took place in production of silkworms and pond fish, and grain production did not grow very fast either. Last year they make a planned retrenchment from more than 10,000 mu of grain fields, restoring them to use as mulberry groves and fishponds. In order to solve the competition for labor, fertilizer, and the seasons between grain production and various businesses, this prefecture carried out a preliminary readjustment of its crop patterns, enlarging the area planted to rape, adjusting its farming system, enlarging the area planted to late crop hybrid rice and ironing out the conflicts between rotation of grain production with numerous

businesses, in fertilizer use, and labor use. Last year, grain output continued to increase throughout the prefecture with production of cocoons, pigs and sheep, and lake-let lambskins [1420 3275 5017 4122] exceeding the highest levels on record. Commune members average income amounted to 190 yuan, and remarkable increases were made in commodity grain, slaughter hogs, silk cocoons, freshwater fish, mao bamboo, and lake-let lambskins provided the state.

Last year the Provincial CCP Committee allocated 200 million jin of grain to solve the problem of food grain for mountain areas, and used another 100 million jin of grain to support development of the forestry industry and other products in mountain regions, and to encourage communes and brigades to pull back from the cultivation of land where forests had been destroyed to make croplands, allowing the land to become forests once again.

In order to give life to the rural economy, the Provincial CCP Committee abolished some of the past prohibitions against broader avenues of production, encouraged and supported each place to make fullest use of local resources, and to vigorously develop planting industries, hatcheries, mining industries, and processing industries for all sorts of farm sideline products.

The pattern of cotton growing had formerly been rather dispersed, making it difficult to increase output. Now, provincial agricultural units have made a preliminary plan for concentrating the numerous cotton fields in a main cotton producing country, while at the same time enlarging the area planted to cotton.

As a result of its preliminary readjustment of the agricultural structure, Zhejiang Province has had some rather outstanding benefits. Last year, total grain output in the province broke 30 billion jin for average per mu yields of more than 1300 jin. Total production of rapeseed amounted to 4.43 million dan for an increase over 1977 of 1.69 million dan and greatly exceeding the highest recorded levels. Mulberry cocoon production reversed a long period of fluctuations and a declining situation with total output amounting to 1.15 million dan to create the highest record since the founding of the People's Republic. Hogs, sheep, rabbits, poultry, and bees all exceeded the highest levels in history. Total output of fresh water fish was double that of the previous year. From increased production of stripped silkworm cocoon alone, the peasants derived an increase in income amounting to more than 80 million yuan.

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CSO: 4007

## PUBLICATIONS

### II. PUBLICATIONS

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[Text] Studies on Wheat Breeding by Distant Hybridization between Wheat and Agropyron glaucum .....Qi Shiyu [4359 6684 7183], Yu Shixuan [0060 0013 6693], Zhang Yaohui [1728 5069 6540], Yu Guanghua [0060 0342 5478] and Song Fengying [1345 7364 5391], all of Heilongjiang Academy of Agricultural Sciences (11)

Problems in Accelerating the Generation of Winter Wheat and Its Character Selection.....Shi Shemin [4258 4357 3046], Li Yuehua [2621 2588 5478] and Wang Wanzhong [3769 5502 1813], all of the Chinese Academy of Agricultural Sciences (12)

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A Preliminary Study on Morphological and Physiological Indices of High-Yielding Spring Wheat in Qaidam Pendi [Chaidamu Basin].....Cheng Dazhi [4453 1129 1807] and Bao Xinkui [7637 2450 1145], both of the Qinghai Institute of Biology, Xining; Chen Zheng [7115 2398], Xiangride Farm, Qaidam [Chaidamu], Qinghai Province (39)

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- A Study on the Uses of the Insect Juvenile Hormone Analogues and the Molting Hormones of Plant Origin to Regulate the Growth and Development of the Silkworm Bombyx mori L., and the Increase of the Yield of Cocoon and Silk.....Research Group of Applying Insect Hormone in Sericulture (87)
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[Note: Most articles are accompanied by English abstracts.]

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- [Text] Detection of Alien Protein in Seeds of Rice Treated with Soya mRNA.....Niu Manjiang [3662 3341 306A] and Zhang Baoying [1728 5508 5391], both of the Department of Biology, Temple University, USA; Ma Cheng [7456 6134] and Lin Zhongping [2651 1813 1627], both of the Institute of Botany, Chinese Academy of Sciences; Zhang Yulian [1728 3768 1670], Institute of Zoology, Chinese Academy of Sciences (302)
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- New Late Cretaceous Pollen Genera and Species in the Jiang Han Basin of Hubei.....Wang Daning [3769 1129 1180] and Zhao Yingniang [6392 5391 1224], both of the Institute of Geology, Chinese Academy of Geological Sciences (326)
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Induction of Callus and Regeneration of Plantlets in Stem Segment Culture of Chinese Gooseberry.....Gui Yaolin [2710 5069 2651], Institute of Botany, Chinese Academy of Sciences (344)

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The Phytocoenological Features of Evergreen Broad-leaf Forest in Guangxi.....Hu Shunshi [5170 5293 1102], Institute of Botany, Chinese Academy of Sciences (370)

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Studies on Biological Character of Sophora alopecuroides L. ....Zhou Lihua [0719 4539 5478], Qinghai Institute of Biology (380)

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Chromosome Engineering in Wheat.....Li Jilin [2621 7162 5259], Biology Department, Harbin Teachers College (1)

#### Reports

Comparison among the Relative Radiosensitivities of Chromosomes in Red Muntjac, Chinese Muntjac and Human--The Relationship of Chromosome Arm Number to Radiation-Induced Frequency of Dicentrics.....Shi Liming [2457 4539 2494], Zhang Xiran [1728 6932 3544] and Wang Jianhua [3769 1696 5478], all of Kunming Institute of Zoology, Chinese Academy of Sciences (5)

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Preliminary Report on the Irradiation Breeding of Citrus sinensis.....Huang Liugen [7806 2692 2704], Institute of Pomiculture, Sichuan Provincial Academy of Agricultural Sciences (10)

Study on Genetic Parameter in Oryza sativa Subsp. Shien Early Variety.....Li Rizhi [2621 2480 1807], Jiang Wenzheng [1203 2429 2973] and Wang Xinmin [3076 2450 3046], all of Jiangxi Provincial Academy of Agricultural Sciences Crop Research Institute, Nanchang (13)

Preliminary Identification of a Monosome in Spring Wheat.....Xie Junfeng [6043 0193 1496] and Sun Li'nan

[1127 4539 0589], both of Qinghai Provincial Plateau Biology Research Institute, Xining (17)

Screen of the Strain Resistant to Temperate Bacteriophage in Bacillus pumilus Str. 1037 and Its Production.....Jiang Ruzhang [5592 1172 3864] and Yu Limin [0060 0448 3046], both of Nankai University Biology Department, Tianjin; Hou Bingyan [0186 3521 3508] and Wu Kunhui [0702 2492 1979], both of Tianjin Enzyme Preparation Plant (21)

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A New Hypothesis about the Process of Antigen Recognition in Macrophage.....Huang Hualiang [7806 5478 2856], Wang Susheng [3769 5685 3932], Zheng Yongmu [6774 3057 2606], Li Xiuzhen [2621 4423 3791], Shang Furong [1424 5346 5554], Wang Zhuang [3769 1104], Chen Ai [7115 5337] and Li Yan [2621 1693], all of the Genetics Institute, Chinese Academy of Sciences (33)

Studies of Silver-Stained NORs in Normal Individuals..... Zhou Xianting [0719 2009 1656], Li Lirong [2621 4539 1369] and Xu Bizhen [6079 4310 3791], all of Team 4, Group 2, Genetics Institute, Chinese Academy of Sciences (33)

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